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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,919	07/10/2001	Kobun Suzuki	209799US-2	7137

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EXAMINER

FAROOQ, MOHAMMAD O

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,919

Applicant(s)

KOBUN SUZUKI

Examiner

Mohammad O. Farooq

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberger, et al. U.S. Pat. No. 6,009,284 in view of Kikuchi et al. U.S. Pat. 5,552,901.

2. As to claim 1, Weinberger et al. teach system comprising:

a firmware download device provided in the central supervisory apparatus and configured to download prescribed updated firmware to an applicable one or more image forming apparatuses in accordance with updated hardware of the one or more image forming apparatuses (via translator; fig. 1, 2,3 and 4; col. 13, lines 23-48); and

a firmware update device provided in each of the image forming apparatuses and configured to update firmware of the one or more image forming apparatuses with the updated firmware when the updated firmware is downloaded (inherent; fig. 1, 2,3 and 4; col. 13, lines 23-48).

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Weinberger et al. do not teach a central supervisory apparatus configured to include a processor; a plurality of communication adapters; and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

3. As to claim 2, Weinberger et al. teach apparatus, wherein the updated hardware includes a control baseboard unit or a unit (inherent; fig. 1, 2, 3 and 4).

4. As to claim 3, Weinberger et al. teach apparatus, wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware (col. 6, lines 1-10).

5. As to claim 4, Weinberger et al. teach apparatus, further comprising:
a Hardware read device configured to read hardware information of each of the plurality of image forming apparatuses (inherent because of user interface and translator; item 60 and 6; fig. 1);

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a hardware information transmission device configured to transmit the hardware information from the each of the plurality of image forming apparatuses to the central supervisory apparatus (inherent; col. 3, line 52- col. 4, line 9; fig. 1);

a database provided in the central supervisory apparatus and configured to store hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);
and

a database update device configured to update the database based upon the hardware information when receiving the hardware information from the one or more image forming apparatuses (inherent; col. 13, lines 23-48).

6. As to claims 5 and 11, Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when power is supplied to the image forming apparatus (inherent; col. 3, line 52- col. 4, line 9).

7. As to claims 6 and 12, Weinberger et al. teach apparatus, wherein the hardware information is periodically transmitted at a prescribed interval (inherent; col. 7, lines 6-26).

8. As to claims 7 and 13, Weinberger et al. teach apparatus, wherein the hardware information is transmitted when prescribed communications are performed between the one or more applicable image forming apparatuses and the central supervisory apparatus (via translator, fig. 1; inherent because of user interface; item 60, fig. 1).

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9. As to claims 8,14 and 15, Weinberger et al. teach apparatus, further comprising a hardware read instruction transmission device provided in the central supervisory system and configured to transmit the hardware instruction to the applicable one or more image forming apparatuses, wherein said hardware information is transmitted when the applicable one or more image forming apparatuses receives the hardware read instruction (inherent because of user interface and translator; item 60 and 6; fig. 1).

10. As to claim 9, Weinberger et al. teach apparatus, further comprising:
a hardware information storage device (i.e. database) provided in each of the plurality of image forming apparatuses and configured to store its own hardware information (col. 4, lines 3-9); and

a hardware information update device configured to update its own hardware information (inherent; col. 13, lines 23-48).

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11. As to claim 10, Weinberger et al. do not teach a version number of the hardware, hardware information stored in the hardware information storage device and update when the at least a version number does conform to the hardware information.

Kikuchi et al. teach a version number of the hardware (i.e. telephone number and user identifiers), hardware information stored in the hardware information storage device (in the address) and update when the at least a version number does conform to the hardware information (col. 6, lines 8-55). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of business applications (col. 3, lines 51-63).

12. As to claim 16, Weinberger et al. teach apparatus, further comprising:

a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware (because of interrupt driven; col. 7, lines 6-26).

13. As to claim 17, Weinberger et al. teach apparatus, wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware (since the translator periodically evaluates the condition of the copier; col. 7, lines 6-26).

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14. As to claim 18, Weinberger et al. teach method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

reading hardware information from hardware of the applicable one or more image forming apparatuses when power is supplied thereto (col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26); and

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downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware (inherent; fig. 1,2,3 and 4; col. 13, lines 23-48).

Weinberger et al. do not teach a central supervisory apparatus configured to include a processor; a communication line; a plurality of communication adapters; and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

15. As to claim 19, Weinberger et al. teach method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

periodically reading hardware information from hardware of the applicable one or more image forming apparatuses (col. 7, lines 6-26; col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

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determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26); and

downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware (inherent; fig. 1,2,3 and 4; col. 13, lines 23-48).

Weinberger et al. do not teach a central supervisory apparatus configured to include a processor; a communication line; a plurality of communication adapters; and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

16. As to claim 20, Weinberger et al. teach method, comprising the steps of:

providing a database configured to store and supervise hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9);

transmitting a hardware read instruction from the central supervisory apparatus to an applicable one or more image forming apparatuses (items 60 and 6, fig. 1);

reading hardware information from hardware of the applicable one or more image forming apparatuses when prescribed communications are performed between the applicable one or more image forming apparatuses and the central supervisory apparatus (col. 7, lines 6-26; col. 3, line 52-col. 4, line 9);

comparing the read hardware information with previously stored hardware information stored in a memory (col. 7, lines 6-26);

determining if both of the read and previously stored hardware information conforms with each other (col. 7, lines 6-26);

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updating the previously stored hardware information with the read hardware information when both of the read and previously stored hardware information do not conform with each other (inherent; col. 13, lines 23-48);

reading the updated hardware information (inherent; item 60 and 6, fig. 1);

transmitting the updated hardware information to central supervisory apparatus when receiving the hardware read instruction (fig. 1);

updating the database when the transmitted hardware information is received (fig. 1; col. 13, lines 23-48);

determining if supervisory information stored in the database conforms to prescribed updated firmware (col. 7, lines 6-26); and

downloading the updated firmware to the applicable one or more image forming apparatuses when the supervisory information conforms to the updated firmware (inherent; fig. 1,2,3 and 4; col. 13, lines 23-48).

Weinberger et al. do not teach a central supervisory apparatus configured to include a processor; a communication line; a plurality of communication adapters; and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

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17. As to claim 21, Weinberger et al. teach apparatus comprising:

a firmware download device configured to download prescribed updated firmware (i.e. possible solution to a problem) to an applicable one or more image forming apparatus in accordance with updated hardware of the one or more image forming apparatus (via translator; fig. 1, 2,3 and 4; col. 13, lines 23-48).

Weinberger et al. do not teach a central supervisory apparatus configured to include a processor; a plurality of communication adapters; and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

18. As to claim 22, Weinberger et al. teach apparatus, wherein the updated hardware includes a control baseboard unit (inherent; fig. 1, 2, 3 and 4).

19. As to claim 23, Weinberger et al. teach apparatus, wherein the updated hardware includes one or more non-volatile memories configured to store prescribed firmware (col. 6, lines 1-10).

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20. As to claim 24, Weinberger et al. teach apparatus, further comprising a firmware update device configured to update firmware of the image forming apparatuses with the updated firmware when the updated firmware is downloaded (inherent; fig. 1, 2,3 and 4; col. 13, lines 23-48).

21. As to claim 25, Weinberger et al. teach apparatus, further comprising:

a hardware read device configured to read hardware information thereof (via translator; fig. 1); and

a hardware information transmission device configured to transmit the hardware information to the central supervisory apparatus (inherent because of user interface; item 60, fig. 1).

22. As to claims 26 and 35, Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom to the central supervisory apparatus when power is supplied thereto (inherent; col. 3, line 52- col. 4, line 9).

23. As to claims 27 and 36, Weinberger et al. teach apparatus, wherein the hardware information is periodically transmitted at a prescribed interval (inherent; col. 7, lines 6-26).

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24. As to claims 28, 37 and 40, Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when prescribed communications are performed with the center system (inherent; col. 3, line 52- col. 4, line 9).

25. As to claim 29, Weinberger et al. teach apparatus, further comprising:
a database configured to store hardware information of the plurality of image forming apparatuses (col. 4, lines 3-9); and
a database update device configured to update the database based upon the hardware information when receiving the hardware information from the one or more image forming apparatuses (inherent; col. 13, lines 23-48).

26. As to claim 30, Weinberger et al. teach apparatus, further comprising a hardware read instruction transmission device configured to transmit the hardware instruction to the applicable one or more image forming apparatuses (inherent because of user interface and translator; item 60 and 6; fig. 1).

27. As to claims 31 and 38, Weinberger et al. teach apparatus, wherein said hardware information is transmitted therefrom when receiving the hardware read instruction (inherent; col. 3, line 52- col. 4, line 9; fig. 1).

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28. As to claims 32 and 39, Weinberger et al. teach apparatus, further comprising:

a hardware information storage device (i.e. database) configured to store hardware information related to the plurality of image forming apparatuses (col. 4, lines 3-9); and

a hardware information update device configured to update the hardware information (inherent; col. 13, lines 23-48).

29. As to claim 33, Weinberger et al. teach apparatus, further comprising:

a hardware information storage device (i.e. database) configured to store hardware information thereof (col. 4, lines 3-9); and

a hardware information update device configured to update the hardware information (inherent; col. 13, lines 23-48).

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30. As to claim 34, Weinberger et al. do not teach a version number of the hardware, hardware information stored in the hardware information storage device and update when the at least a version number does conform to the hardware information.

Kikuchi et al. teach a version number of the hardware (i.e. telephone number and user identifiers), hardware information stored in the hardware information storage device (in the address) and update when the at least a version number does conform to the hardware information (col. 6, lines 8-55). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of business applications (col. 3, lines 51-63).

31. As to claim 41, Weinberger et al. teach apparatus, further comprising:

a conformity check device provided in the firmware download device configured to check conformity of the supervisory information including at least the hardware information with the updated firmware, wherein said updated firmware is downloaded if the supervisory information conforms to the updated firmware (because of interrupt driven; col. 7, lines 6-26).

32. As to claim 42, Weinberger et al. teach apparatus, wherein the updated firmware is regenerated so as to conform to the supervisory information, if the supervisory information does not conform to the updated firmware (since the translator periodically evaluates the condition of the copier; col. 7, lines 6-26).

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33. As to claim 43, Weinberger et al. teach apparatus, comprising:

central supervisory means for remotely supervise image forming means (via interface, fig. 1; fig. 2, 3 and 4).

firmware download means for downloading prescribed updated firmware to an applicable one or more image forming apparatuses in accordance with updated hardware of the one or more image forming means, said firmware download means provided in the central supervisory means (via translator; fig. 1, 2,3 and 4; col. 13, lines 23-48); and

firmware update means device for updating firmware of the one or more image forming apparatuses with the updated firmware when the updated firmware is downloaded, said firmware update means being provided in each of the image forming means (inherent; fig. 1, 2,3 and 4; col. 13, lines 23-48).

Weinberger et al. do not teach communication means and a plurality of interfaces. Kikuchi et al. teach a central supervisory apparatus configured to include a processor (inherent); a plurality of communication adapters; and a plurality of interfaces (fig. 4, 16 and 17). However, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Weinberger et al. and Kikuchi et al. because that would provide parallel runs of other business applications (col. 2, lines 59-62).

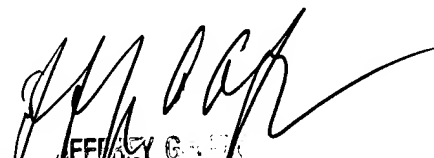
34.

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35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Mohammad O. Farooq
March 14, 2005